Abstract Submitted
for the APR20 Meeting of
The American Physical Society

The connection between electric charge, gravitation, and the Feynman sum over all histories view of quantum electrodynamics DT FROEDGE, Formerly Auburn University — In the introduction to Feynman's *Six Easy Pieces* it was said: "You could not imagine the sum-over-histories picture being true for a part of nature and untrue for another part. You could not imagine it being true for electrons and untrue for gravity" The purpose of this paper is to show that Gravitation and Electric Charge are the result of the interaction of the Feynman path photons. Feynman proposed that for a photon, or any particle, going from one point to another, there is a probability of the particle has traveled every possible path, and by very accurate measurements of quantum effects there is every reason to believe that this is true. It is shown that the interaction of these Feynman path photons generated by mass particles change the index of refraction of space, and can constitutes the effects of gravitation and electric charge.

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Date submitted: 01 Jan 2020 Electronic form version 1.4